## **Background**

Conference participants who elected to participate on the Competitiveness Issue Team received a read-ahead paper, which summarized competitiveness issues raised by the participants at the Regional Listening Sessions. Attendees at the Regional Listening Sessions expressed the need for a "seamless" transportation system. When attendees at the Regional Listening Sessions described the attributes of a seamless "world-class" transportation system, they spoke of ease in complying with local entrance and clearance processes; of safe navigation systems; of adequate facilities to accommodate docking and the discharge of cargo; and of quick turnaround of their vessels. In addition, diverse and incompatible technologies and information management systems among MTS stakeholders and users, coupled with high cost of developing and employing new technology and information systems, present major obstacles to a seamless transportation system. The anticipated changes in technology, increases in cargo volume and throughput and the computer technology necessary for the safe, efficient and faster movement of cargo will require skilled MTS professionals capable of employing new technology.

Based upon the concerns of the Regional Listening Sessions and the National Conference participants, the Competitiveness Issue Team explored three major issues:

- ♦ There is no national strategy to ensure U.S. competitiveness.
- ♦ Marine Transportation System (MTS) resources for research are insufficient and implementation of new technology is uncoordinated.
- ♦ There is a critical shortage of trained MTS labor to meet tomorrow's sophisticated demands.

#### **Outcomes**

## **National Maritime Strategy**

The Competitiveness Issue Team cited a lack of MTS leadership and a strategic plan as major contributing factors, which negatively impacts MTS competitiveness. The type of leadership envisioned is cooperative and coordinates planning between the public/private sectors. The goal of the Competitiveness Issue Team was to develop a National Maritime Strategy that funds the MTS as an inclusive system to maintain and improve U.S. competitiveness. The Competitiveness Issue Team made a number of recommendations to reach this goal. These recommendations are summarized as follows.

- ♦ Designate a cabinet-level advocate for the MTS.
- Create a National MTS Council to coordinate public/private strategies.

- ◆ Fund the MTS Federal responsibilities as a function of improving U.S. competitiveness.
- Direct agencies to assess impacts of procedures/policies on U.S. Competitiveness.
- ◆ Secure better government/industry planning and consensus for the prioritizing of projects.
- Quantify the impact of, and seek public input on, proposed maritime taxes and fees.
- ◆ Require the integration of intermodal freight needs into the Municipal Planning Organizations (MPOs) and state plans and programs.
- Expand the existing Interagency Committee on Waterways Management.
- Review Federal laws and regulations to identify gaps and eliminate conflicts.
- Focus public awareness on the need for MTS investment.
- Assure availability of analytical planning tools and data.

## Research and Technology

To strengthen resources and institutions for Marine Transportation Research, the Competitiveness Issue Team made a number of recommendations. Diverse and incompatible technologies and information management systems among MTS stakeholders and users, coupled with the high cost of developing and employing new technology and information systems, presents major obstacles to a seamless transportation system. The challenge is to identify the best practices currently employed in technology, information systems and management planning and develop programs to build in these best practices. The Competitiveness Issue Team's recommendations to improve the competitiveness of the United States through research and technology are summarized below.

- Provide for intermodal freight research in DOT budget including MTS.
- ♦ Coordinate and focus MTS research and technology efforts by industry, government and academia.
- Define and assess best world practices in maritime technology and applications including benchmarking for port efficiency and productivity.
- Reduce barriers to integration of the MTS technology into the total transportation system.

#### Labor

The ability to compete in the Twenty-first century depends on the availability of skilled labor capable of employing new technology. Well-trained, multi-skilled employees will be required to operate land and waterside equipment and electronic information systems. These skilled professionals are critical not only to competitiveness but also for maintaining a safe work environment, protection of the environment and national security. To meet the labor needs of the future for military, long shore, shipyard, inland and seafaring, the Competitiveness Issue Team made the following summarized recommendations:

- Create public/private partnerships and programs to recruit, retain and educate MTS professionals.
- ♦ Create public/private partnerships and programs to address quality of life issues unique to maritime/MTS careers and market and emphasize maritime heritage and value of MTS careers.
- ♦ Create a DOT, DOD, industry associate and private sector partnership to address existing and future personnel shortages due to licensing standards and other factors.

ISSUE —a description of the issue area of discussion starting with the issue title.	ISSUE: THERE IS NO NATIONAL STRATEGY ON THE MTS THAT ENSURES US COMPETITIVENESS
GOAL—provide a brief description of the specific outcome for the year 2020 which describes a certain action (e.g., increase, maintain, reduce, etc.) within a broad area covered by the issue.	GOAL 1: BUILD A NATIONAL MARITIME STRATEGY THAT INCLUDES FUNDING MTS AS AN INCLUSIVE SYSTEM IN A MANNER THAT WILL MAINTAIN AND IMPROVE US COMPETITIVENESS

	RECOMMENDED ACTIONS	Recommended Lead	Time Frame
A	Designate cabinet-level advocate for success of the MTS and create a broad based National Marine Transportation System Council, chaired by the cabinet level designee to integrate and coordinate public and private sector strategy, policy, and goals for the MTS.	President	S
В	Secure better government/industry planning and consensus on project priority.	National Council	S
C	Identify and establish financing mechanisms for public/private partnerships for MTS projects.	National Council	
D	Conduct a competitiveness impact analysis of all taxes and fees related to the MTS and secure appropriate public input before imposition.	National Council	
Е	Establish a focused government/industry mechanism to gain greater public awareness of need for investment in MTS.	National Council	

GOAL—provide a brief description of the specific outcome for the year 2020 which describes a certain action (e.g., increase, maintain, reduce, etc.) within a broad area covered by the issue.

# GOAL 1: BUILD A NATIONAL MARITIME STRATEGY THAT INCLUDES FUNDING MTS AS A COMPLETE SYSTEM IN A MANNER THAT WILL MAINTAIN AND IMPROVE US COMPETITIVENESS

\*\*CONTINUED\*\*

F	Advocate elimination of foreign trade barriers.	National Council	
G	Expand the existing Interagency Committee on Waterways Management (including all federal agencies with responsibilities in the MTS) to ensure US competitiveness through improved federal coordination and dialogue.	Cabinet Designee	
Н	Assess impacts of procedures and policies on US competitiveness and multimodal environmental impacts.	Interagency	
I	Conduct a comprehensive review of federal laws and regulations to identify gaps and eliminate conflicting mandates on the MTS.	National Council	
J	Provide Federal funding for MTS in manner that will maintain and improve US competitiveness in the international and domestic trade.	Cabinet Designee	S
K	Require the integration of intermodal freight transportation needs be incorporated into MPO and state DOT plans and programs.	FHWA Congress	
L	Assure availability of analytical planning tools including data and benchmarking of best transportation policies and practices.	National Council	

Issue—a description of the issue area of discussion starting with the issue title.	ISSUE: THE ROLE OF FEDERAL GOVERNMENT IN MTS RESEARCH IS IMBALANCED
GOAL—provide a brief description of the specific outcome for the year 2020 which describes a certain action (e.g., increase, maintain, reduce, etc.) within a broad area covered by the issue.	GOAL 2: STRENGTHEN THE FEDERAL GOVERNMENT RESOURCES AND INSTITUTIONS AVAILABLE FOR MTS RESEARCH

	RECOMMENDED ACTIONS	Recommended Lead	Time Frame
A	Define and assess best world practices in maritime technology and applications including benchmarking for port efficiency and productivity.	MARAD	M
В	Establish an administrative procedure (e.g. take-down) from the annual DOT budget for freight and international trade, research and technology inclusive of the MTS initiative.	USDOT	S
C	Support national and regional MTS strategic plan developed jointly by public and private stakeholders.	USDOT	M
D	Maintain and disseminate planning and operational data.	USDOT Customs COE	M
E	Develop international standards through consensus process (e.g. labeling, tracking weight limitations).		L
F	Support environmental assessment of transportation alternatives.	USDOT COE	М
G	Restore appropriations for maritime enhancement institutes.	Congress USDOT	S

Issue—a description of the issue area of discussion starting with the issue title.	ISSUE: ROLE OF MTS IN TOTAL TRANSPORTATION SYSTEM IS UNCLEAR
GOAL—provide a brief description of the specific outcome for the year 2020 which describes a certain action (e.g., increase, maintain, reduce, etc.) within a broad area covered by the issue.	GOAL 3: CONDUCT RESEARCH TO FIND WAYS TO INTEGRATE MTS INTO OTHER TRANSPORTATION ENTERPRISES

	RECOMMENDED ACTIONS	Recommended Lead	Time Frame <sup>1</sup>
A	Reduce Barriers to incorporating MTS technological innovations into total transportation enterprise	MARAD	S
В	Leverage Intelligent Transportation System (ITS) technology lessons learned and apply where appropriate to MTS to link legacy systems	USDOT	S
С	Promote and educate state and metropolitan executive leadership in the integrated role of MTS in the intermodal transportation system.	USDOT	М
D			
E			
F			
G			

The time frame is defined as the time to complete the action from today: (S) short-term is less than 2 years, (M) mid-term is 2-5 years, and (L) long-term is 5+ years.

ISSUE—a description of the issue area of discussion starting with the issue title.	ISSUE: MARITIME R&T IS FRAGMENTED
GOAL—provide a brief description of the specific outcome for the year 2020 which describes a certain action (e.g., increase, maintain, reduce, etc.) within a broad area covered by the issue.	GOAL 4: COMBINE AND FOCUS MTS R&T EFFORTS BY PRIVATE INDUSTRY, LOCAL, STATE, FEDERAL GOVERNMENT AND ACADEMIA.

	RECOMMENDED ACTIONS	Recommended Lead	Time Frame <sup>1</sup>
A	Encourage interagency R&T cooperation to provide leadership to MTS research	USDOT	M
В	Promote and expand cooperative R&T programs between government and industry.	MARAD	Cont.
С	Jointly define and periodically update R&T national agenda.	USDOT	M
D	Conduct technological assessment and promote and monitor MTS application.	National Council	M
Е			
F			
G			

The time frame is defined as the time to complete the action from today: (S) short-term is less than 2 years, (M) mid-term is 2-5 years, and (L) long-term is 5+ years.

Issue—a description of the issue area of discussion starting with the issue title.	ISSUE: THERE IS A CRITICAL SHORTAGE OF TRAINED MTS LABOR WORLD WIDE IN BOTH THE PUBLIC AND PRIVATE SECTOR.
GOAL—provide a brief description of the specific outcome for the year 2020 which describes a certain action (e.g., increase, maintain, reduce, etc.) within a broad area covered by the issue.	GOAL 5: RECRUIT, RETAIN AND EDUCATE MTS PROFESSIONALS (MILITARY, LONGSHORE, SHIPYARD, INLAND AND SEAFARING).

	RECOMMEND ACTIONS	Recommended Lead	Time Frame <sup>1</sup>
	Create public and private partnerships and programs to recruit, retain and		
A	educate MTS professionals (military, longshore, shipyard, inland and seafarer).		
В	Create public and private partnerships and programs to address quality of life issues unique to maritime/MTS careers.		
С	Create coordinated public and private marketing campaign to emphasize maritime heritage and value of MTS careers.		
D	Create DOT, DOD, industry associations and private sector partnership to address existing and future personnel shortages e.g. brought about by IMO and international standards.		
E	Retain and expand the use of USMMA as a training school for intermodal transportation		
E	Create a program to ensure a pool of qualified personnel is available to meet national security requirements.		

The time frame is defined as the time to complete the action from today: (S) short-term is less than 2 years, (M) mid-term is 2-5 years, and (L) long-term is 5+ years.